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## Special Article

### COMMEMORATION OF THE CENTENNIAL OF THE INTRODUCTION OF ANESTHESIA IN OBSTETRICS BY SIR JAMES Y. SIMPSON\*

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IT IS a great privilege to speak on this occasion, when the New York Obstetrical Society commemorates the Centennial of the Introduction of Anesthesia in Obstetrics by Sir James Y. Simpson, for Simpson is one of my heroes.

He died long before I was born, but I was house surgeon to his nephew and successor, Sir Alexander Simpson, who often talked to me about him. I have dined in the same dining room and off the same table round which Simpson and his friends gathered when they tested out on themselves the effects of various agents which might have anesthetic properties and ultimately found chloroform. I occupied for four years the professorial Chair of Midwifery and Diseases of Women in the University of Edinburgh, the chair to which Sir James Simpson has given distinction for all time. For these reasons I have a very personal feeling for him and for all that he did. So much so, that I took him as the subject of part of my inaugural address as President of the American Gynecological Society. My talk to you tonight may therefore be somewhat repetitious, and for this I ask your indulgence.

Simpson's contribution to the alleviation of human suffering arose in no haphazard fashion. He was a man of great mental capacity and was endowed with a true scientific spirit. Already as a schoolboy, the seventh son of poor parents, he had studied the flora and geology of the countryside. He was head of his school at the age of fourteen when he entered the faculty of Arts of the University of Edinburgh. He never completed his Arts course for after two years he was attracted to medicine. He completed his medical course and passed the final examination at the age of 19 and had to wait two years before he could be graduated and be licensed to practice. These two years were occupied in attending again the course in Midwifery, in acting as assistant to the professor of pathology, in assisting the doctor in his native village of Bathgate and in travel to London and the continent of Europe.

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November 4th, 1847—on returning home after a weary day's labor, Dr. Simpson with his two friends and assistants, Dr. Thomas Keith and J. Matthews Duncan, sat down to their somewhat hazardous work in Dr. Simpson's dining room. Having inhaled several substances, but without much effect, it occurred to Dr. Simpson to try a ponderous material, which had been formerly set aside on a lumbar table, and which, on account of its great weight, he had hitherto regarded as of no likelihood whatever. That happened to be a small bottle of chloroform. The bottle was searched for, and recovered from beneath a heap of wastepaper. And, with each tumbler newly charged, the inhalers resumed their vocation. Immediately an unwonted hilarity seized the party; they became bright-eyed, very happy and very loquacious—expatiating on the delicious aroma of the new fluid. The conversation was of unusual intelligence, and quite charmed the listeners—some ladies of the family and a naval officer, brother-in-law of Dr. Simpson. But suddenly there was a talk of sounds being heard, like those of a cotton mill, louder and louder; a moment more, then all was quiet, and then—a crash.

“On awakening, Dr. Simpson's first perception was mental, ‘This is far stronger and better than ether,’ he said to himself. His second was to note that he was prostrate on the floor, and that among the friends about him there was both confusion and alarm. Hearing a noise, he turned round and saw Dr. Duncan beneath a chair—his jaw dropped, his eyes staring, his head bent half under him; quite unconscious, and snoring in a most determined and alarming manner. More noise still, and much motion. And then his eyes overtook Dr. Keith's feet and legs making valorous efforts to overturn the supper-table, or more probably to annihilate everything that was on it; I say, more probably, for frequent repetitions of inhalation have confirmed, in the case of my esteemed friend, a character for maniacal and unrestrainable destructiveness, always under chloroform, in the transition stage. By and by, Dr. Simpson having regained his seat, Dr. Duncan having finished his uncomfortable and unrefreshing slumber, and Dr. Keith having come to an arrangement with the table and its contents, the sederunt was resumed. Each expressed himself delighted with the new agent, and its inhalation was repeated many times that night—one of the ladies gallantly taking her place and turn at the table—until the supply of chloroform was fairly exhausted.”

There can now be no question but that to Simpson belongs the sole credit of being the first to suggest and to use general inhalation anesthesia with ether in labor and that he was the first to demonstrate the anesthetic property of chloroform. While time has not confirmed Simpson's assertion that chloroform was a better and safer anesthetic than ether, some of us still regard it as having a very definite place in obstetrics.

The first mother to receive chloroform anesthesia during labor was the wife of Dr. Carstairs of Edinburgh. The child, a girl, was named “Anaesthesia.” Her portrait at the age of 17 stood on Simpson's desk, and he called her his patron saint, “St. Anaesthesia.”



I quote its concluding paragraph because it puts in a nutshell the sequence of events in the discovery of anesthesia. Here are Simpson's words:

"If we try to put into a summarized form the data which we have been discussing regarding the introduction of anesthesia in America and this country, it appears to me that we might correctly state the whole matter as follows:

"1—That on the 11th December, 1844, Dr. Wells had, at Hartford, by his own desire and suggestion, one of his upper molar teeth extracted without any pain, in consequence of his having deeply breathed nitrous oxide gas for the purpose, as suggested nearly half-a-century before by Sir Humphrey Davy.

"2—That after having with others proved, in a limited series of cases, the anesthetic powers of nitrous oxide gas, Dr. Wells proceeded to Boston to lay his discovery before the Medical School and Hospital there, but was unsuccessful in the single attempt which he made, in consequence of the gas-bag being removed too soon, and that he was hooted away by his audience, as if the whole matter were an imposition, and was totally discouraged.

"3—That Dr. Wells' former pupil and partner, Dr. Morton of Boston, was present with Dr. Wells when he made his experiments there.

"4—That on the 30th September, 1846, Dr. Morton extracted a tooth without any pain whilst the patient was breathing sulphuric ether, this fact and discovery of itself making a New Era in anesthetics and in surgery.

"5—That within a few weeks (October 16th) the vapour of sulphuric ether was tried in a number of instances of surgical operations in Boston—Dr. Morton being generally the administrator; and ether vapour was established as a successful anaesthetic in dentistry and surgery.

"6—That in January, and the subsequent spring months, 1847, the application of sulphuric ether as an anesthetic in midwifery was introduced (by me), described in our medical journals, and fully established in Edinburgh, before any case with it was tried in Boston or America.

"7—That on the 15th November, 1847 (that is the date of the publication of his paper), the anesthetic effects of chloroform were discovered in Edinburgh, and that it swiftly superseded in Scotland and elsewhere the use of sulphuric ether, and extended rapidly and greatly the practice of anesthesia in surgery, midwifery, etc."

The letter continues: "I am very sorry to have taken up so much of your time and my time with such a petty discussion as the present. It has extended to too great length; but I am a sad invalid just now, and quite unable to write with the force and brevity required. With many of our profession in America I have the honour of being personally acquainted, and regard their friendship so very highly that I shall not regret this attempt—my last perhaps—at professional writing as altogether useless on my part, if it tends to fix my name and memory duly in their love and esteem.

"Yours very truly, J. Y. Simpson."

The news of Simpson's death reached Boston by cable before his letter arrived and the Gynecological Society of Boston held a Memorial Meeting in honor of their "late beloved associate" who was, they said, "one of nature's noblemen."

Thus the ultimate result was that Simpson freely acknowledged—as he had always done—that he believed that Morton was the first man to produce general anesthesia to the surgical degree by the administration of ether, and Bigelow acknowledged that Simpson was the first man to use ether as an anesthetic in obstetrics and that he discovered the anesthetic properties of chloroform.

You will note that neither of them makes any mention of Jackson, although Simpson, in some of his earlier writings, does note that it was he who had sug-

gested ether as an anesthetic to Morton; nor is Long mentioned, and yet there seems to be no doubt that it was Long who, in 1842, first used ether as an anesthetic in the performance of a surgical operation.

The controversy among these five men, Crawford W. Long, Horace C. Wells, William T. S. Morton, Charles T. Jackson and James Young Simpson extended over many years. Their rival claims were supported by a host of protagonists, most of them willfully blind to the opposing facts and many of them swayed by geographical and national prejudices. Morton, Wells, and Jackson were Northerners and Long was a Southerner. Is it to be wondered at that, during the period when the Civil War was brewing, boiling over, and ended, the Southerner was forgotten and ignored by the triumphant North? Or was it strange that all should combine against the claims of the foreigner?

So far as the principals were concerned, it ended in tragedy for the three Northerners who spent their time and their substance in fighting their claims against each other and getting nowhere. Wells committed suicide, Morton died in penury, and Jackson spent his last years and died in an insane asylum. Long, ruined by the War, rebuilt his fortunes as a practicing physician in Georgia and died in harness at a ripe old age.

Simpson alone had honors heaped upon him, but he died a comparatively young man, he was just 58—worn out by hard work. He was created a baronet; he enjoyed a very large and very lucrative practice, but never did he allow his active mind any rest. His writing was done at all hours of the day and night while waiting on the delivery of his patients. He lived to see the use of anesthesia in labor become general, a tremendous impetus to its acceptance being given when Queen Victoria gave birth to her two youngest children under the influence of chloroform. It was administered by Dr. John Snow, the first man in Britain to limit his practice to anesthesia.

I quote you a description, somewhat fulsome according to our present standards, given of Simpson when at the zenith of his powers, by one of his contemporaries.

“In stature the Professor is somewhat under the middle size. The roundness of his whole form and the absence of Scotch ‘processes of bone’ would authorize the inference of English extraction. His ambrosial locks, dark and almost imperceptibly shaded with red, fall upon his shoulders. No feature in the Professor’s countenance is overgrown. The forehead is broad and projecting rather than lofty. There is much firmness about the mouth and the lips. The eye is brilliant, and looks out from the eyebrows with an energy and penetration betraying great mental power. With the fiercer radiation of its eagle fires is blended the soft glow of a warm heart, which gives it a decided intellectual and moral expression. There is a fascination in his air, manners and conversation, an irresistible moral gravitation which elicits and wins the admiration, love and confidence of all who come within the magic circle of its influence.”

A medical colleague wrote in 1848: “Decidedly the most wonderful man of the age in which he lives is Simpson of Edinburgh. Nothing baffles his intellect, nothing escapes his penetrating glance, he sticks at nothing, he bungles nothing. From all parts, not of Britain only, but of Europe, do ladies rush to see, consult and fee the little man.”



Another described him as possessing: "The head of Jove, the body of Bacchus."

James Young Simpson conferred upon women a great blessing. But it was not at first an unmixed blessing. The general use of anesthesia was followed not by a diminution but rather by an increase in maternal mortality. Milne Murray of Edinburgh, writing in the year 1900, said, "I feel sure that an explanation of much of the increase of maternal mortality from 1847 onwards will be found in, first, the misuse of anesthesia, and, second, the ridiculous parody which, in many practitioners' hands, stands for the use of antiseptics. Before the days of anesthesia, interference was limited and obstetric operations were at a minimum, because interference of all kinds increased the conscious suffering of the patient. When anesthesia became possible, and interference became more frequent because it involved no additional suffering, operations were undertaken when really unnecessary, on the demand of the patient or for the convenience of the practitioner. And so complications arose and the dangers of labor increased."

We have gone a long way since these words were written, forty-seven years ago. We have got newer and better analgesics and anesthetics, and a better understanding of their use, whilst the profession at large has been educated out of the era of "meddlesome midwifery," with the result that today maternal mortality is at an all-time low in this and in many other countries.

This result could not have been achieved without our analgesic and anesthetic agents. As domiciliary midwifery has gradually been superseded by hospital obstetrics, our aseptic techniques have been perfected until they are on a par with those of general surgery. This, together with the use of the sulphonamides and penicillin, accounts for much of the fall in maternal mortality. The meticulous carrying out of these techniques would be extremely difficult or impossible with a restless patient.

But we must be careful not to go to extremes and yield to the clamor of uninformed lay demand as expressed in certain of our popular magazines and newspapers for absolutely painless labor for all women. If we do so, we may have a repetition of the events which followed in 1847.

No honest obstetrician can ever promise to any woman an absolutely painless labor. He can promise to make her labor as painless as possible consistent with safety to herself and to her child. He cannot, beforehand, accede to a request for some particular form of pain relief. He must reserve to himself the choice of which method he will use and at what stage in labor he will use it according to circumstances.

The greatest honor we can pay today to the memory of Sir James Young Simpson is to use and not abuse the gift he gave us.